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7590 Tara Chand Singhal P.O. Box 5075 Torrance, CA 90510				
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MONFELDT, SARAH M				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/891,913

Applicant(s)

SINGHAL, TARA CHAND

Examiner

SARAH M. MONFELDT

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 106-108 is/are pending in the application.
- 4a) Of the above claim(s) 109-124 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 106-108 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION
Status of Claims

1. This action is in reply to the Amendment/Response filed on 18 July 2008.
2. Claims 106-124 were added.
3. Claims 77-80, 94-105 were canceled.
4. Claims 106-108 are currently pending and have been examined.
5. Claims 109-124 have been withdrawn from further consideration.

Specification

6. The Examiner notes claims 109-124 now require an algorithm encoded on the substrate which is different from the previously presented encryption/decryption algorithm. As best understood a code or sequence number is included in the magnetic strip (not the algorithm, please refer to paragraph [0090] of the published application) as shown in Applicants Figure 4C, element 424, (Encoding code 354C). Moreover, it appears that this sequence code is used to find/map the related consumer information in the bankcard data base which is separate from the database which contains the alias names/PINs using an algorithm within the alias database. The code now claimed is therefore different than the previously claimed encryption code.

Election/Restrictions

7. Newly submitted claims 106-124 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:
 - a. Group I: Claims 106-108 drawn to a method of protecting bankcard data and securely selecting any one of a plurality of bankcards of a customer at a merchant point of sale, classified in class 705, subclass 18;
 - b. Group II: Claim 109-113, drawn to a payment card system that protects private data of a customer in a customer to merchant payment, that includes an algorithm encoded on its substrate, classified in class 235, subclass 380;
 - c. Group III: Claims 114-117, drawn to method of conducting a payment transaction that protects privacy of customer identity and bankcard data (with algorithm), classified in class 705, subclass 18;
 - d. Group IV: Claims 114, 118-122, drawn to method of conducting a payment transaction that protects privacy of customer identity and bankcard data (wirelessly and with algorithm), classified in class 705, subclass 18;

- e. Group V: Claims 123-124, drawn to a payment security system that provides identity security in use of bankcards (with algorithm and plurality of bankcard data), classified in class 705, subclass 18.
8. The inventions are distinct, each from the other because Inventions I, III-V are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. Group I is directed to a POS transaction. Group III is directed to a POS transaction that includes the claimed algorithm. Group IV is directed to a POS transaction that includes the claimed algorithm and is wireless. Group V is directed to a POS transaction with the claimed algorithm and a customer having a plurality of bankcards. In the instant case, each invention has separate utility (See MPEP 806.05d).
9. Please also note that Groups II-V now require an algorithm encoded on the substrate which is different from the previously presented encryption/decryption algorithm. As best understood a code or sequence number is included in the magnetic strip as shown in Applicants Figure 4C, element 424, (Encoding code 354C). Moreover, it appears that this sequence code is used to find/map to the related consumer information in the bankcard data base which is separate from the database which contains the alias names/PINs. The code now claimed is therefore different than the previously claimed encryption code.
10. Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 67 and 86-93 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the first paragraph of 35 U.S.C. 112:
- The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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12. Claims 106-107 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims recite "merchant gateway", the specification does not find antecedent basis for this recitation. The specification states that the gateway is a computer system that routes the data for payment authorization to the bank card authorization network. Appropriate correction is required.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
14. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
15. Claims 106-108 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Rose et al.* (US 5770843) in view of *Campisano* (US 6227447), further in view of *Duyck* (US 5557087)

Examiner's Note: The Examiner has pointed out particular references contained in the prior art of record within the body of this action for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply. Applicant, in preparing the response, should consider fully the entire reference as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Claim 106 –

As per claim 106, Rose disclose *a method of protecting bankcard data and securely selecting any one of a plurality of bankcards of a customer at a merchant point of sale interface for a payment transaction to a merchant having the limitations of:*

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- *selecting a debit card transaction requiring entry of a PIN in a merchant point of sale (POS) interface, entering of (i) a customer identifier, without customer identity data, having a payment card that encodes the customer identifier and (ii) a bankcard specific personal identification number (CPIN) in the merchant point of sale (POS) interface; (see at least col. 2, ll. 1-3, 14-22, 24-27; col. 3, ll. 46-55, col. 4, ll. 16-40, of Rose)*
- *interfacing by the merchant gateway with a payment card system, and sending by the merchant gateway to the payment card system the customer identifier and the CPIN; (see at least col. 2, ll. 1-3, 14-22, 24-27; col. 3, ll. 46-55, col. 4, ll. 16-40, of Rose)*
- *having stored customer bankcard data in the payment card system, wherein each bankcard is identified with a separate CPIN, identifying a particular bankcard data of the customer and verifying the customer by the bankcard specific CPIN in the payment card system; (see at least col. 3, l. 26 through col. 4, l. 61 of Rose)*

Rose et al. do not explicitly disclose:

- *sending the customer identifier and the CPIN, by the POS, to a merchant gateway, along with the payment transaction data that includes a merchant identifier and payment amount;*
- *returning to the merchant gateway the bankcard data corresponding to the customer identifier and the CPIN from the payment card system.*

Campisano teach *sending the customer identifier and the CPIN, by the POS, to a merchant gateway, along with the payment transaction data; returning to the merchant gateway the bankcard data corresponding to the customer identifier and the CPIN from the payment card system* (see at least col. 2, l. 66 through col. 3, l. 10). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose to include a verification process and subsequent charging of the credit card as taught by Campisano. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in this way since the verification process is similar to that used to verify original credit card numbers and expiration dates and once the number has been verified, the merchant processes the transaction and the credit card is charged, completing the transaction (see at least col. 2, l. 66 through col. 3, l. 10 of Campisano).

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Duyck teach *the payment transaction data that includes a merchant identifier and payment amount* (see at least Figs. 2-3 and col. 3, ll. 33-52). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose in view of Campisano to include transaction amount and unique merchant code as taught by Duyck. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in view of Campisano in this way since the unique merchant code links the transaction to a particular merchant (see at least col. 3, ll. 33-52 of Duyck).

Claim 107 –

Rose in view of Campisano further in view of Duyck teach the method of claim 106 as described above. Campisano further disclose *a method* having the limitations of:

- *assembling a payment transaction record to include the bankcard data from the payment card system and the payment transaction data, and processing the payment transaction by the merchant gateway by submitting a payment transaction record to a prior art bankcard authorization network. (see at least Fig. 1, col. 2, ll. 31-37; col. 2, l. 66 through col. 3, l. 10 of Campisano)*

The motivation for making this modification to the teachings of Rose is the same as that set forth above, in the rejection of Claim 106.

Claim 108 –

Rose in view of Campisano further in view of Duyck teach the method of claim 106 as described above. Campisano further disclose *a method* having the limitations of:

- *having access to the payment card system by the customer; (see at least col. 3, ll. 7-26, 45-66 of Campisano)*
- *entering the bankcard data and self-selecting a CPIN for each of the bankcards of the customer. (see at least col. 3, ll. 7-26, 45-66 of Campisano)*

The motivation for making this modification to the teachings of Rose is the same as that set forth above, in the rejection of Claim 106.

Response to Arguments

16. Applicant's arguments with respect to claims 106-108 have been considered but are moot in view of the new ground(s) of rejection and are not persuasive for at least the following reasons:

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1. The Examiner has pointed out particular references contained in the prior art of record within the body of this action for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply. Applicant, in preparing the response, should consider fully the entire reference as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

2. Examiner would like to point out that the Supreme Court in *KSR International Co. v. Teleflex Inc.* described seven rationales to support rejections under 35 U.S.C. 103:

- Combining prior art elements according to known methods to yield predictable results;
- Simple substitution of one known element for another to obtain predictable results;
- Use of known technique to improve similar devices (methods, or products) in the same way;
- Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results;
- "Obvious to try" –choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success;
- Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art; and
- Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.

3. Prior art is not limited just to the references being applied, but includes the understanding of one of ordinary skill in the art. The prior art reference (or references when combined) need not teach or suggest all the claim limitations; however, Office personnel must explain why the difference(s) between the prior art and the claimed invention would have been obvious to one of ordinary skill in the art. The "mere existence of differences between the prior art and an invention does not establish the invention's nonobviousness." see *Dann v. Johnson*, 425 U.S. 219, 230 (1976).

4. With regard to Rose the Examiner respectfully points out col. 3, l. 26 through col. 4, l. 61 which is directed to ADDITIONAL CONSIDERATIONS. Rose teaches the following:

"Ordinarily, when a customer makes a credit card purchase at a retail establishment, the establishment request confirmation of validity of the credit card from the issuer of the credit card. In doing so, the establishment is required

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to identify itself, by providing its "store number," whereupon the establishment is given a transaction number, which is used to identify the purchase."

"In one form of the invention, a conclusion is reached as to the identity of the customer. That, is when the customer provides a PIN which matches that associated with an account number stored in the database, the customer is deemed to be an authentic owner of that account. The conclusion can be either expressly acknowledged, as by a cashier stating, "Mr. Wilcox, your identity has been verified," or tacitly acknowledged, by proceeding with the transaction, under the assumption that the customer is actually Mr. Wilcox."

"The code contained within the magnetic stripe is actually a set of signals. This set of signals, when delivered to the card reader in FIG. 5B, and thence to database management software in FIG. 4, cause the software to fetch the account numbers and PINs, shown in FIG. 5D, which are associated with the code."

"Thus the code acts as a key to unlock and release the account numbers and PINs. In principle, the code is no different than a key which unlocks a strongbox which contains the database in a paper format."

5. With regard to Campisano the Examiner respectfully points out col. 2, l. 66 through col. 3, l. 10, col. 4, ll. 6-10, 22-25, which it teaches the following:

"The verification process is similar to that used to verify original credit card numbers and expiration dates. Once the number has been verified, the merchant processes the transaction and the credit card is charged in step 32. After the credit card has been charged, the transaction is complete."

"A current card member is a person that already has a credit card account with the credit card company and is merely calling to activate their alias and select a PIN."

"Consumers who have a plurality of credit cards have the option of selecting multiple PINs, each of which would correspond to a different credit card. When making a purchase, the cardholder need only provide the PIN corresponding to the card he or she wishes to charge the purchase on."

"If the cardmember decides to destroy the plastic card and rely solely on the Cardless Payment System then the chances of the card being lost or stolen are practically zero." Thus, Campisano recognizes that an actual card can exist.

"A single cardmember may have multiple PINs representing different credit cards. It would be possible to assign one PIN to their Visa card and another PIN to their Mastercard, both on the same phone number."

6. Based on the above comments with respect to Rose and Campisano the Examiner disagrees with Applicant's assessment of the references alone and in combination. Both references teach a "plastic card" with an "alias" and PINs for different financial accounts associated with that alias. As presented

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above, Rose teaches an alternative which include using the card at a merchant site with a cashier in which the customer swipes his/her card and enters a PIN. Rose also teaches that the magnetic strip is embedded with a code which does not directly correspond to any account number of a credit account held by the owner and that the codes acts to unlock and release account numbers and the PINs in the database management software. Applicant states that Campisano does not authorize a transaction. The Examiner respectfully disagree with the assessment, as pointed out above Campisano teaches -

"The verification process is similar to that used to verify original credit card numbers and expiration dates. Once the number has been verified, the merchant processes the transaction and the credit card is charged in step 32. After the credit card has been charged, the transaction is complete."

and therefore teaches completing a transaction.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the Examiner has addressed issues raised by Applicant above with respect to Rose and Campisano.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

The fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SARAH M. MONFELDT whose telephone number is (571)270-1833. The examiner can normally be reached on Monday-Friday 7:30am-5:00pm (EST) ALT Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Abdi can be reached on (571)272-6702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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